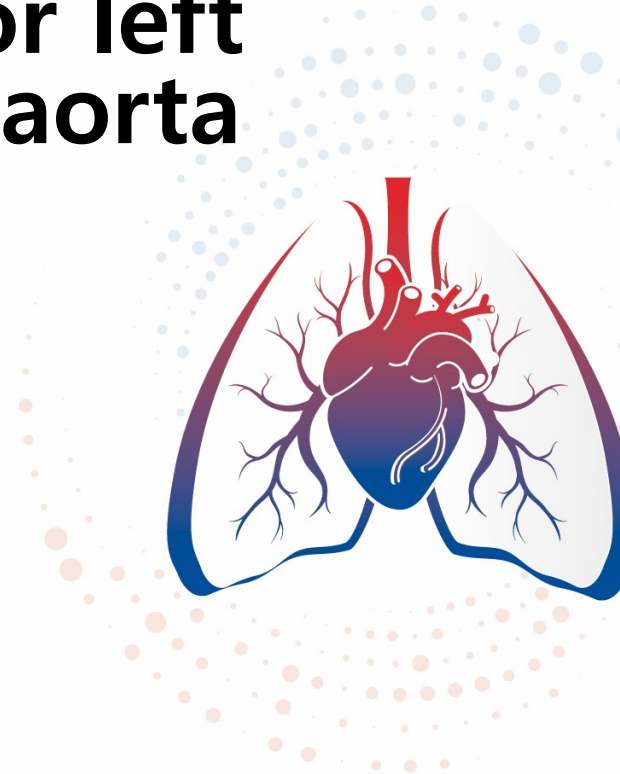


2023 대한심장혈관흉부외과학회

제55차 추계학술대회 & APELSO 2023

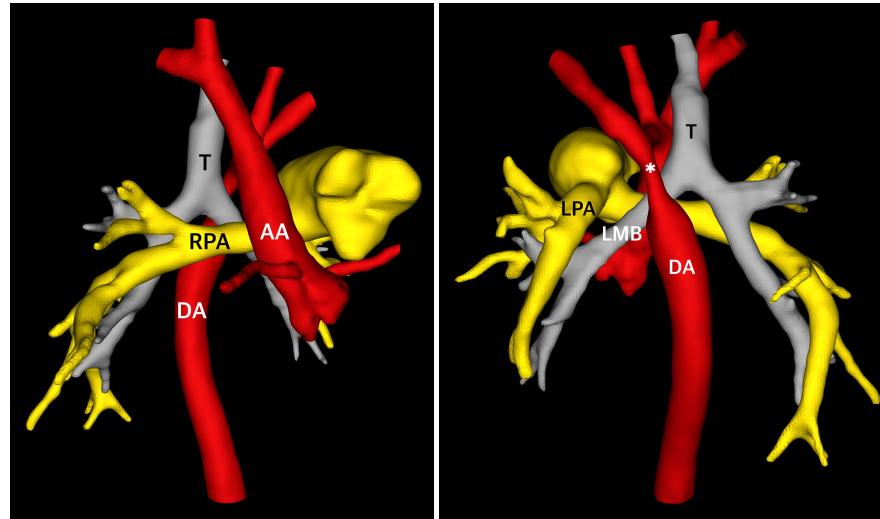
2023. 11. 02 (Thu) - 11. 04 (Sat), 그랜드 인터컨티넨탈 파르나스 서울

Descending aortic translocation for left aortic arch with right descending aorta and coarctation of the aorta

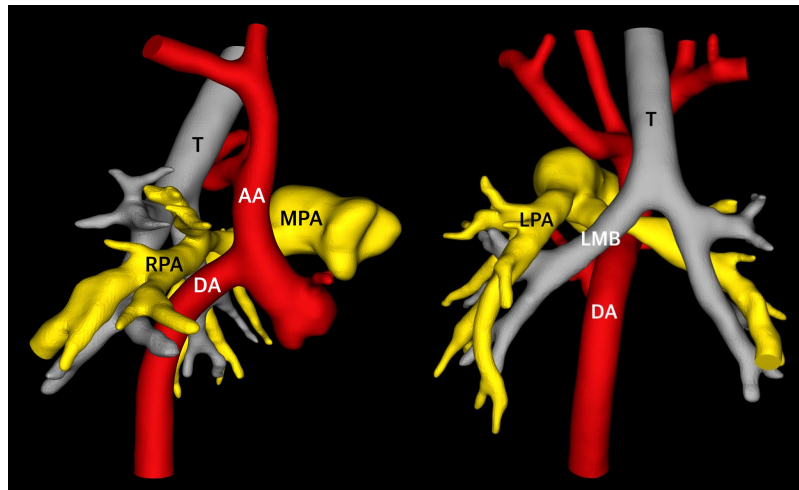


- Left aortic arch with right descending aorta associated with coarctation of the aorta is a rare congenital cardiac anomaly. Conventional aortic arch repair in this condition may cause airway compression by the abnormally coursing descending aorta. We present the case of a neonate with this anomaly who underwent successful descending aortic translocation to prevent postoperative left main bronchial stenosis.

- An 11-day-old full-term neonate with birth weight of 3.5 kg was admitted to our center due to tachypnea and decreased feeding. Echocardiography revealed left aortic arch, coarctation of the aorta with arch hypoplasia, a large VSD, a PFO, and moderate degree of LV dysfunction. PDA was not observed. CT revealed a descending aorta that coursed from left to right traversing the midline. There is a concern that conventional aortic arch repair in the setting of malalignment of the aortic arch and descending aorta may cause airway compression by the abnormally coursing descending aorta. For this reason, we planned descending aortic translocation to prevent postoperative left main bronchial stenosis.



- Innominate artery and both caval veins were cannulated for CPB. During cooling, extensive mobilization of the descending aorta was performed. The VSD and the PFO were closed through a RA incision. Ligation of the aortic isthmus and clamping of the descending aorta were performed, and the ductal tissue was completely excised from the descending aorta. The descending aorta was then mobilized through the transverse sinus inferior to the tracheal carina and RPA. Selective cerebral perfusion was initiated, and the aortic cross-clamp was removed. An incision was made on the posterior aspect of the proximal ascending aorta, and an anastomosis of the descending aorta to the ascending aorta was accomplished using a 7-0 polypropylene running suture. Post-operative course was uncomplicated. CT before discharge revealed widely patent pathway to the descending aorta and both main bronchi.



- Descending aortic translocation may be a useful surgical option to prevent airway stenosis in patients with coarctation of the aorta and midline-crossing descending aorta.